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A NEW SPECIES OF ANTICHAETA HALIDAY, WITH NOTES ON OTHER SPECIES OF THE GENUS

(DIPTERA: SCIOMYZIDAE)1,2

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The new species described below was discovered too late to be incorporated into the recent paper by Steyskal (1960) revising the genus Antichaeta.

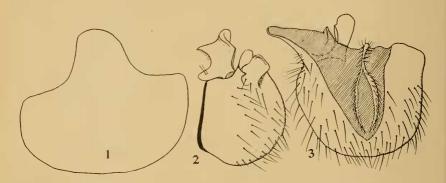
Antichaeta borealis, sp. nov.

Male.—Length of body: 4.5 mm. Length of wing: 4.0 mm. Head: Frons dull yellowish except for shining meso-and parafrontal stripes and very narrow pruinose stripes bordering eyes; occiput with two elongate pruinose spots; face strongly pruinose; palpi wholly yellow; antennae with two basal segments yellowish, third segment bicolored with basal half yellowish, apical half blackish, arista

¹Published with the approval of the Director of the Idaho Agricultural Experiment Station as Research Paper No. 483.

²This investigation was supported, in part, by a research grant (E-743) from the National Institute of Allergy and Infectious Diseases, U. S. Public Health Service.

with loose, black hairs; anterior fronto-orbital bristle nearly as long as posterior bristle. Thorax: Largely yellowish-brown; pleura lightly pruinose; mesonotum with two dark stripes centrally that are bounded laterally by broader pruinose stripes, sides of mesonotum pruinose; scutellum wholly yellowish-brown. Wings: Membrane wholly hyaline; halters light yellow. Legs: Largely yellowish; fore legs with coxae lighter, femora and tibiae somewhat infuscated distally, tarsi strongly darkened; middle and hind legs uniformily yellow. Abdomen: Yellowish-brown, more yellowish distally; andrium yellowish and shining; terminalia as figured.



Antichaeta borealis, sp. nov. Fig. 1, outline of fifth abdominal sternite; fig. 2, dextral lateral view of postabdomen; fig. 3, posterior view of postabdomen. (Drawings by George C. Steyskal)

Female.—Length of body: 4.6 mm. Length of wings: 4.2 mm. Coloration and non-genitalic structural characters as in male.

Holotype (male) and allotype.—Eight miles north of Sandpoint, Bonner County, Idaho, June 1, 1959 (B. A. Foote). Deposited in Cornell University collection. Paratypes. Three males, same collection data as for holotype; one male, Upper Enfield State Park near Ithaca, New York, April 2, 1957, reared from puparium, biological note F-5706; one male, one female, White Church marsh, Tompkins County, New York, May 15, 1958, reared from puparia; one male, Inlet Valley, Ithaca, New York, June 14, 1958. All paratypes collected by B. A. Foote. Two paratypes in University of Idaho collection, one paratype in United States National Museum, one paratype in collection of George C. Steyskal, three paratypes in Cornell University collection.

Remarks: The presence of long anterior fronto-orbital bristles indicates that this species is close to A. robiginosa Melander and A. testacca Melander, differing chiefly by the bicolored third antennal segment, by the differently patterned thoracic dorsum and by the distinctive male terminalia.

The Idaho specimens of A. borealis were swept from herbaceous vegetation growing in a small, partially shaded marsh located in a borrow pit between U. S. Highway 95 and the road bed of the Great Northern Railway.

In Steyskal's key the new species runs to couplet 17, at which place the following may be substituted:

- 18(17) Anterior fronto-orbital bristle nearly as long as prosterior bristle and sometimes reduplicated

20(19) Third antennal segment wholly yellow

Antichaeta analis (Meigen)

Mr. Steyskal has asked me to include the results of his recent examination of a specimen that apparently forms the basis for the only record of A. analis (Meigen) (synonym, vittata Haliday) in North America (Osten Sacken, 1858). The specimen is in the Museum of Comparative Zoology and was examined through the courtesy of P.

J. Darlington, Jr.

The specimen is labelled "Massac, Austin/Loew Coll./ vittata Hal." and consists of a part of the posterior mesonotum, the scutellum,, two wings, one fore and most of one middle leg. It agrees in all those parts with the female allotype of A. fulva Steyskal and A. borealis, sp. nov. According to descriptions of A. analis by Hendel and Sack, it differs from the former two species by having black palpi (palpi yellow in fulva and borealis) and by having the third antennal segment wholly black (this segment yellow basally in fulva and borealis). They also mention that analis has darkish mesonotal stripes that converge and unite on the scutellum. Both the examined specimen in the Loew collection and the types of fulva and borealis have no darkening on the scutellum.

Thus the old record of A. analis occurring in North America may

be considered as referring either to A. fulva or borealis.

Antichaeta melanosoma Melander

A single specimen collected on June 1, 1959 at Copeland, Boundary County, Idaho (B. A. Foote) extends the known range of this species into the Pacific Northwest. Previous records were from the northcentral states and from the Northeast. The specimen was taken by sweeping hydrophilic vegetation bordering a shallow, partially shaded pond.

Antichaeta testacea Melander

Recent records for Idaho and Utah are given below: IDAHO: four miles east of Shoshone, Lincoln County, May 22, 1959, one male, one female, (B. A. Foote); two miles west of Gannet, Blaine County, May 22, 1959, six males (B. A. Foote). UTAH: Parowan, Iron County, July 15, 1941, one female (F. C. Harmston, G. F. Knowlton); Midvale, Salt Lake County, August 18, 1953, one

male (G. F. Knowlton); Payson, Utah County, August 7, 1942, one female (W. E. Peay, G. F. Knowlton). The Idaho specimens are in the University of Idaho collection; the Utah material is in the Utah State University collection.

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BOOK REVIEW

A MANUAL OF COMMON BEETLES OF EASTERN NORTH AMERICA, by Elizabeth S. Dillon and Lawrence S. Dillon. Row, Peterson and Company, Evanston, Illinois and Elmsford, New York. 884 pages, 81 pls. 1961. \$9.25.

The amount of work involved in preparing this manual would have deterred many of less stout heart! The task of selecting and describing approximately 1,200 species (from an estimated 10,000 species in Eastern North America) must have been difficult enough but the work involved in preparing the 1,344 (17 in color) illustrations is equally as impressive.

The introduction provides information on collecting, methods and materials, pinning and labeling, structure, beetle larvae and keys. An interesting chapter on ecology illustrates how beetles have adapted to many unusual ecological niches. Keys to 64 common families and most of the keys to the genera included in this manual are amply illustrated. However, keys to species are not abundantly illustrated. The book closes with a useful glossary, bibliographies arranged by subject and by geographic areas, and an index to all taxa referred to in the manual.

It is not unexpected that a few errors have been made in a manual covering such a wide scope. For example: In the Preface, Dr. Chapin, who is currently active in research, has been referred to as "the late Dr. Chapin." The scientific names of some common pests are not up to date. The description of the dermestid genus Thylodrias (p. 378) reads "elytra soft, parallel-sided; wingless." Apparently "female" was omitted before "wingless," because only the female is wingless. Two figures are reversed on two plates. On plate 41, fig. 4 is Anchicera ephippiata and fig. 5 is Antherophagus ochraceus. On plate 74, fig. 8 is Metriona bivittata and fig. 9 is Plagiometriona clavata.

Regardless of the few minor errors in the manual, it will be especially useful to beginning students of Coleoptera and will also serve as a handy reference for anyone interested in beetles of Eastern North America.

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